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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,671	06/15/2001	Youichirou Sugino	04558/050001	9498

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EXAMINER
DICUS, TAMRA

ART UNIT	PAPER NUMBER
1774	12

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/882,671	SUGINO ET AL.	
	Examiner	Art Unit	
	Tamra L. Dicus	1774	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 21-47* is/are pending in the application.

4a) Of the above claim(s) *36-41* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,21-35 and 42-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

The 112 rejections are withdrawn. Examiner acknowledges claims 19 and 20.

Response to Amendment

The 102(b) and 103(a) rejections are maintained for reasons of record. See a prior office action dated 11/21/02, Paper No. 10.

Election/Restrictions

1. Newly submitted claims 36-41 are directed to an invention that is independent or distinct from the invention originally claimed. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 36-41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

2. Claim 42 is objected to because of the following informalities: Line 3 contains "strating" when it should be starting. Also claim 2 appears to lack antecedant basis by referring to "the strating material". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-18, 21-35, and 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,361,838 to Miyatake et al. in view of USPN 5,914,073 to Kobayashi et al., and USPN 6,065,457 to Aminaka.

Miyatake teaches an optical film/member that may be used to produce a multilayer structure by providing optical layers on sides of a polarizing/retardation film that includes absorption types like hydrophilic polymer films of PVA that have been stretched. See col. 7, lines 39-65, and col. 8, lines 5-54. Such optical films, like those of instant claims 17 and 29-34 may be used to produce the following types of films: absorption type, reflection type, scattering type polarizers, retardation films including a quarter-wavelength plate, a half-wavelength plate, a retardation film comprising a uni- or biaxially or otherwise stretched film, a film comprising a film which has undergone inclined orientation, i.e., which has undergone molecular orientation also in the thickness direction, a film comprising a liquid crystal polymer, a film in which a retardation caused by a viewing angle or birefringence is compensated for, and a film comprising two or more of these retardation films superposed on each other. See col. 8, lines 1-54. Miyatake teaches a polarizing film also includes a polarizing film comprising any of the above-described polarizing films and a transparent protective layer formed on one or each side thereof for the purpose of protection against water. The protective layer may be, for example, a coating layer of a plastic or a laminated film layer. Refer to col. 8, lines 28-30. Miyatake does not explicitly define the aforementioned functional films as "brightness-enhanced" or a "transflector". The Examiner takes the position that the phrase "brightness-enhanced" is a functional equivalent of the optical film of Miyatake at col. 7, lines 38-51 since the optical film that

functions to improve perceptibility and bright displays as taught by Miyatake at col. 6, lines 50-60. The Examiner also takes the position that "transflector" is synonymous to an optical layer that reflects or scatters light as taught above in the aforementioned film types. Also note Aminaka teaches liquid crystal displays having ellipsoidal polarizing plates containing optical layers that result in a display exhibiting refractive index and retardation values, which are considered to be a reflector/transflector. Aminaka also teaches a protective layer and adhesive layer may be on a transparent polymer film (also using triacetyl cellulose and hydrophilic polymers). See col. 11, lines 1-33-45, and col. 20, line 30-col. 21, line 35.

Miyatake also teaches using an adhesive layer having a thickness of 20 microns of an acrylic PSA in Example 2. Miyatake does not explicitly state a protective or polarizing layer may have thicknesses in the ranges claimed in instant claims 3, 4, 6, 10, 11, 24, 25, and 27. However, at col. 5, lines 45-50 Miyatake teaches it is known to provide a thickness to a film anywhere from 1 to 500 microns. In addition Kobayashi explicitly teaches thickness of a polarizer is dependent upon the polymer desired at col. 3, line 34-40, and teaches polymeric thickness may range from 20 microns to 1 mm of a polymeric film serving as a polarizer film, or as a protective film may range from 0.1 to 30 microns at col. 4, one 51. Therefore it would have been obvious to one of ordinary skill in the art to modify a film to provide specific thicknesses attributed to any polymeric layer such as a protective or polarizing layer since Miyatake teaches films can be between 1 and 500 microns especially suited for films made by extrusion (changing the die size easily changes the thickness) at col. 5, lines 25-50 and Kobayashi teaches thickness is dependent upon the polymer chosen at col. 3, line 34-40.

Miyatake does not explicitly state the heat treatment of a polarizer at the process requirements of time and temperature of claims 1, 2, 8, 16, and 21-23, e.g. 70 degree Celsius for 120 hours of claim 16, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render Applicant's claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. Additionally, Kobayashi teaches process variables of 80 and 100 degrees Celsius for 5 minutes and stretching in the MD direction under such conditions of time and temperature directly effects the thickness of film (see Examples 1, 2, 6). Hence, the polarizing plate thickness relationship of claim 8 and 9 are result effective variables also. Kobayashi explicitly teaches thickness of a polarizer is dependent upon the polymer desired at col. 3, line 34-40, and teaches polymeric thickness may range from 20 microns to 1 mm of a polymeric film serving as a polarizer film, or as a protective film may range from 0.1 to 30 microns (meeting Applicant's ranges from 20 to 75 microns of claims 42, 46, and 47) at col. 4, lines 1-51. Moreover, such treatment language are process limitations in a product claim. Process limitations not given any patentable weight. See MPEP 2113.

Miyatake does not disclose the polymerization and saponification degrees properties of PVA of claims 7 and 28, such properties are inherent since the same material is used. Additionally, Aminaka teaches using PVA having saponification degree of not

smaller than 80% and a polymerization degree preferably of not smaller than 200. See col. 20, lines 5-12.

Regards to new claims 42-45, crosslinking and/or stretching film are process limitations in a product claim and are not given any patentable weight.

Response to Arguments

4. Applicant's arguments filed 2-19-03 have been fully considered but they are not persuasive. Applicant alleges the claims are do not include shrinking force as a process limitation, that it is a pre-measurement step and hence, Kobayashi is not applicable. The very description of the shrinking force by Applicant admits that it is indeed a process limitation by referring to it as a "pre-measurement *step*". A step is a part of a process, and is in fact a process limitation. Applicant further alleges the Kobayashi reference does not concern primarily a polarizing film, but a protective film applied to a polarizing film. This statement, again by Applicant's admission, states that in deed a polarizing film is taught since Kobayashi refers to and uses it. The thickness of such films are taught by Kobayashi and is hence taught.

5. Applicant contends that Miyatake can not be a polarizer and does not teach a "brightness enhancement" film. This is not true. Miyatake states the optical element can be used as a polarizer at **col. 8, lines 5-40.** Also, the Examiner takes the position that the phrase "brightness-enhanced" is a functional equivalent of the optical film of Miyatake at col. 7, lines 38-51 since the optical film that functions to improve perceptibility and bright displays as taught by Miyatake at col. 6, lines 50-60. Since light is indecent on the film and transmits and scatters polarized light.

6. Applicant also alleges that Miyatake does not teach a "transflector". However, Applicant appears to contradict himself by stating a portion of light is either reflected and transmitted, then admitting that the term "transflector" is not synonymous with an optical layer that reflects or scatters light. Miyatake teaches films that reflect and transmit light and as admitted by Applicant, is synonymous with the term "transflector".

7. In response to Applicants belief that Miyatake and Kobayashi don't teach the thickness requirements, the Examiner does not agree. Kobayashi teaches process variables of 80 and 100 degrees Celsius for 5 minutes and stretching in the MD direction under such conditions of time and temperature directly effects the thickness of film (see Examples 1, 2, 6). Hence, the polarizing plate thickness relationship of claim 8 and 9 are result effective variables also. Kobayashi explicitly teaches thickness of a polarizer is dependent upon the polymer desired at col. 3, line 34-40, and teaches polymeric thickness may range from 20 microns to 1 mm of a polymeric film serving as a polarizer film, or as a protective film may range from 0.1 to 30 microns (meeting Applicant's ranges from 20 to 75 microns of claims 42, 46, and 47) at col. 4, lines 1-51.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus
Examiner
Art Unit 1774

May 7, 2003

DEBORAH JONES
SUPERVISORY PATENT EXAMINER